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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/672,804	09/27/2003	Curtis A. Tesdahl	10030006-1	9508

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AGILENT TECHNOLOGIES, INC.  
Legal Department, DL429  
Intellectual Property Administration  
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EXAMINER

KOBERT, RUSSELL MARC

ART UNIT PAPER NUMBER

2829

DATE MAILED: 05/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/672,804		TESDAHL ET AL	
	<b>Examiner</b>		<b>Art Unit</b>	
	Russell M. Kobert		2829	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 February 2005.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 7-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>0903</u> . | 6) <input type="checkbox"/> Other: _____  |

1. Applicant's election with traverse of Invention I, Species (a), Sub-Species (f), claims 1-6, in the reply filed on February 18, 2005 is acknowledged. The traversal is on the ground(s) that the methods disclosed in claims 23-28 contain a combination of elements that are not materially different from the combination of elements of claims 1-22. This is not found persuasive because the methods as claimed further require a sequence of operating steps in addition to its material requirement. Moreover, there exists a method of using that does not sense a signal at a second node of interest as disclosed in claim 23, rather the method requires capacitively sensing a signal on the same node of interest also stimulated with a known signal; see claim 25. This is a materially different process of using the product. Hence there exists a plurality of different methods of using the product as claimed that demonstrates at least one process of using the product that is distinct from that of the apparatus. The traversal is further on the ground(s) that claim 1 reads on each of the species of Figures 2, 10, 12 and 15 and is thus generic. This is not found persuasive because although Applicants indicate claim 1 is generic to each of the species according to the identified Figures, no admission has been made that claim 1 is generic to each of independent claims 7 and/or 14. Having claim 1 generic to each of Figures 2, 10, 12 and 15 does not imply that claims 7 or 14 are generic to each of Figures 2, 10, 12 and 15. Even if this were the case, claim 1 may not be generic to claims 7 and/or 14. If Applicants insist that the species are not patentably distinct, any evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other species. Upon allowance of a generic claim, applicants will be entitled to consideration of claims to additional species which

are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 7-28 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected Invention and/or Species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on February 18, 2005.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Nasuta et al (4488301).

Nasuta et al anticipates an electrical integrity testing apparatus (Figures 1, 6, 7 and 8) for testing electrical integrity of nets on a circuit under test (shown as PROGRAMMABLE ARRAY LOGIC (PAL16R6)), comprising:

a stimulating probe (shown as any one of connections between NAND Gate 69 and Pin 1 of PAL16R6 in addition to coupled signals between READ ONLY MEMORY 61 and Pins 2, 3, 4 and 5 of PAL16R6 further including Power Supply connections to Pins 11 and 20) couplable to a first end (respective exterior leads of PAL16R6) of a net of interest on said circuit under test;

a signal generator (+5V supply or STOP-RUN F/F 64 of Figure 6) couplable to said stimulating probe operable to generate a known signal;

a capacitive sensing probe (30) operable to capacitively couple a signal from a second end of said net of interest when said known signal stimulates said first end of said net of interest; and

a signal correlator (20) which performs signal correlation on a digital representation of said capacitively coupled signal with said known signal based only on said capacitively coupled signal and an expected digital signature ("reference Walsh Transform coefficients"; col 3, ln 33-34) of said known signal (see col 2, ln 20 - col 6, ln 66 for detailed description).

The limitations of claims 2-6 are considered inherent within the operable scope of the apparatus of Nasuta et al because Nasuta et al discloses other typical prior art techniques for analyzing complex signals (col 1, ln 15-28 and col 6, ln 65-66) *capable of* use with the same apparatus.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Rierner (4583042) and Khazam et al (5786697) show other capacitive coupling techniques for testing circuit boards.


Scott et al (4709366) shows a test system comprising applied stimulus signals to a Device Under Test and a measurement probe for testing signals at various nodes.

6. A shortened statutory period for response to this action is set to expire three month(s) from the date of this letter. Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Russell Kobert whose telephone number is (571) 272-1963. The Examiner's Supervisor, Nestor R. Ramirez, can be reached at (571) 272-2034. For an automated menu of Tech Center 2800 phone numbers call (571) 272-2800.



Russell M. Kobert  
Patent Examiner  
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April 26, 2005



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04/28/05